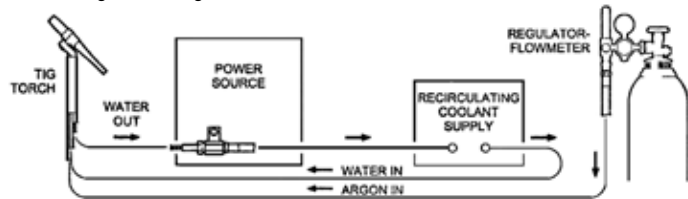


**WARRANTY:** CK Worldwide, Inc. warrants products manufactured by CK Worldwide, Inc. to be free of defects in materials and workmanship. CK Worldwide, Inc. limits this warranty to replacement of the product or parts thereof and excludes liability for injury, property damage or economic loss attributable to product use or misuse. In any event, CK Worldwide, Inc. will only be responsible for its products when used with accessory items manufactured by CK Worldwide, Inc.

**INSTALLATION:** Before using this torch, - tighten regulator, hose and power cable fittings with proper wrenches. Using small pliers, securely tighten all knurled hose fittings (Slide the torch handle back for access to the torch connections). Purge the regulator and TIG torch with inert gas at 20 cubic feet per hour. Following these steps will ensure contamination free welds. Repeat this procedure whenever torch or regulator fittings have been detached.

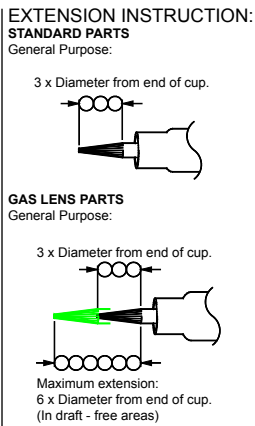
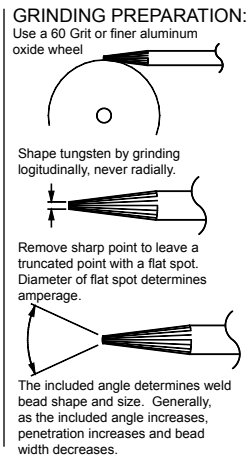
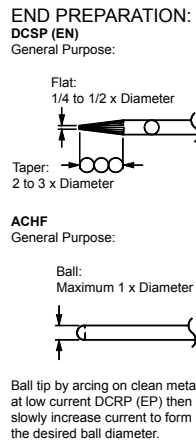
**CONNECTION DIAGRAM:**



**INFORMATION CHART:**

| Electrode Diameter in inches (mm) | Cup Size   | WELDING CURRENT (AMPS) - TUNGSTEN TYPE |              |            |                | ARGON FLOW - FERROUS METALS |                        | ARGON FLOW - ALUMINUM  |                        |
|-----------------------------------|------------|--|--------------|------------|----------------|-----------------------------|------------------------|------------------------|------------------------|
|                                   |            | AC Pure                                | AC Thoriated | DCSP Pure  | DCSP Thoriated | Standard Body (Liters)      | Gas Lens Body (Liters) | Standard Body (Liters) | Gas Lens Body (Liters) |
| .020 (0.50)                       | 4 or 5     | 5 - 15                                 | 5 - 20       | 5 - 15     | 5 - 20         | 5-8 (3-4)                   | 5-8 (3-4)              | 5-8 (3-4)              | 5-8 (3-4)              |
| .040 (1.00)                       | 4 or 5     | 10 - 60                                | 15-80        | 15 - 70    | 20 - 80        | 5-10 (3-5)                  | 5-8 (3-4)              | 5-12 (3-6)             | 5-10 (3-5)             |
| 1/16 (1.60)                       | 4, 5 or 6  | 50 - 100                               | 70 - 150     | 70 - 130   | 80 - 150       | 7-12 (4-6)                  | 5-10 (3-5)             | 8-15 (4-7)             | 7-12 (4-6)             |
| 3/32 (2.40)                       | 6, 7 or 8  | 100 - 160                              | 140 - 235    | 150 - 220  | 150 - 250      | 10-15 (5-7)                 | 8-10 (4-5)             | 10-20 (5-10)           | 10-15 (5-7)            |
| 1/8 (3.20)                        | 7, 8 or 10 | 150 - 210                              | 220 - 325    | 220 - 330  | 240 - 350      | 10-18 (5-9)                 | 8-12 (4-6)             | 12-25 (6-12)           | 10-20 (5-10)           |
| 5/32 (4.00)                       | 8 or 10    | 200 - 275                              | 300 - 425    | 375 - 475  | 400 - 500      | 15-25 (7-12)                | 10-15 (5-7)            | 15-30 (7-14)           | 12-25 (6-12)           |
| 3/16 (4.80)                       | 8 or 10    | 250 - 350                              | 400 - 525    | 475-800    | 475-800        | 20-35 (10-17)               | 12-25 (6-12)           | 25-40 (12-19)          | 15-30 (7-14)           |
| 1/4 (6.40)                        | 10         | 325 - 700                              | 500 - 700    | 750 - 1000 | 700 - 1100     | 25-50 (12-24)               | 20-35 (10-17)          | 30-55 (14-26)          | 25-45 (12-21)          |

**TUNGSTEN PREPARATION:**



**CAUTION:** Personal harm will result from touching the hot parts of a TIG torch without insulative protection, or from looking directly or indirectly at an arc or reflected arc. At no time should bare skin be exposed to a welding arc.



## TIG TORCH MANUAL



### CKM 350 WATER COOLED

#### TECHNICAL INFORMATION

RATING @ 100% DUTY CYCLE: 400 AMP ACHF OR DCSP  
COOLING METHOD: WATER COOLED

#### ACCESSORY ITEMS REQUIRED FOR COMPLETE INSTALLATION:

HEAD ACCESSORIES: 3 SERIES HEAD ACCESSORIES  
POWER CABLE ADAPTOR: 45V11 (2PCA)  
MODEL SELECTOR - TORCH PACKAGES

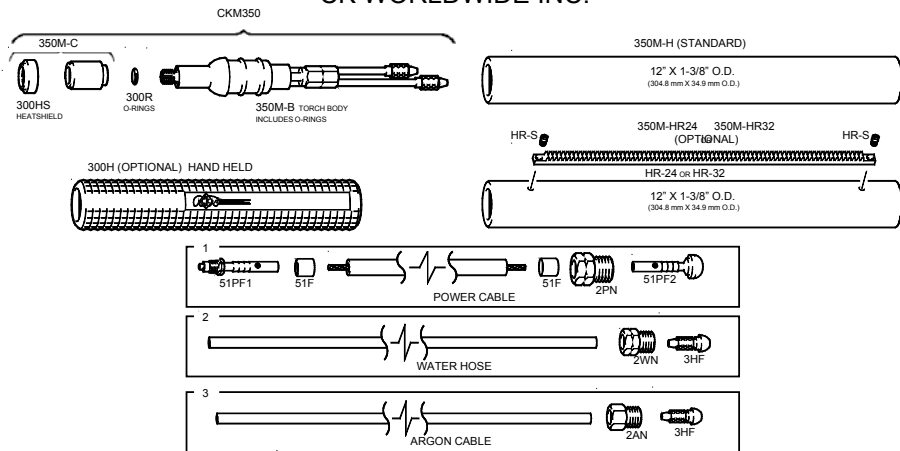
| CKM 350      |                 |              |            |             |
|--------------|-----------------|--------------|------------|-------------|
| HEAD STYLE   | CABLE           | LENGTH       | STANDARD # | SUPERFLEX # |
| Barrel Style | Separate Cables | 12½ft (3.8m) | CKM3512    | CKM3512SF   |
|              |                 | 25ft (7.6m)  | CKM3525    | CKM3525SF   |

**IMPORTANT !!**  
**READ AND UNDERSTAND THE INFORMATION CONTAINED IN THIS MANUAL BEFORE OPERATING THE EQUIPMENT !**

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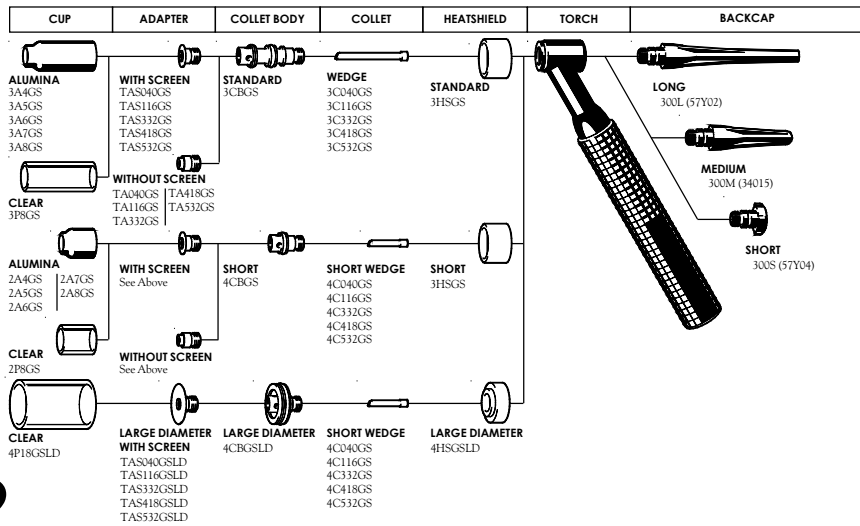
www.ckworldwide.com  
ck@ckworldwide.com



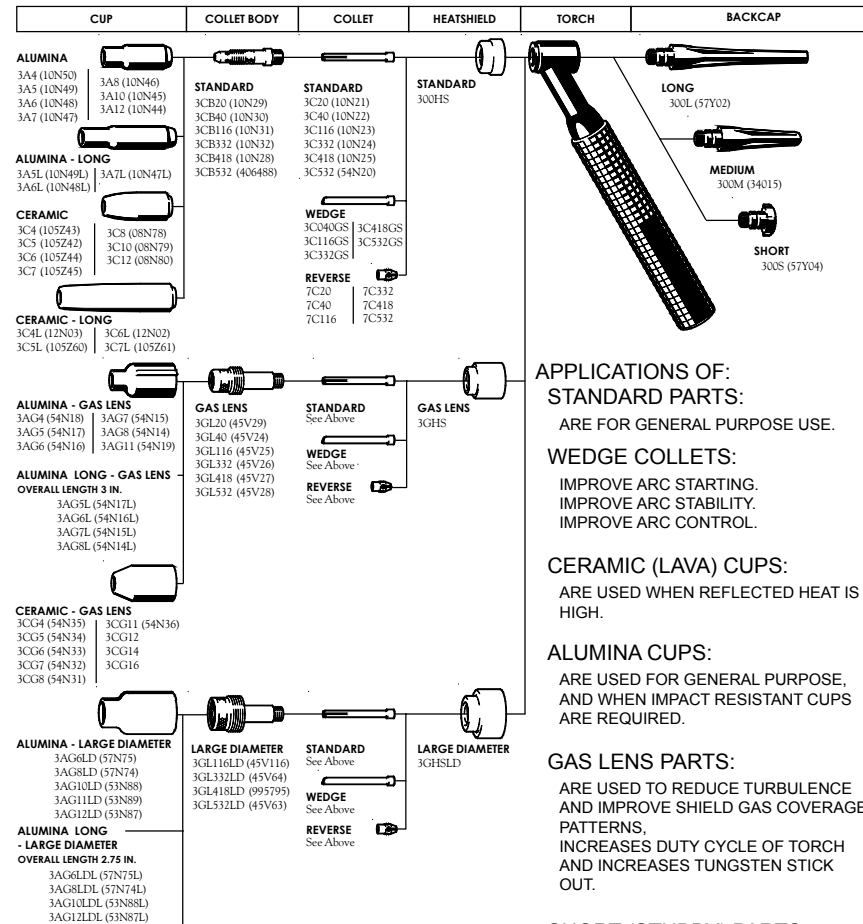
|   | STANDARD CABLES   | SUPERFLEX CABLES  |
|---|---|---|
| 1 | POWER CABLE<br>12-1/2 FT (3.8M): 512PC<br>25 FT (7.6M): 525PC | POWER CABLE<br>12-1/2 FT (3.8M): 512PCSF<br>25 FT (7.6M): 525PCSF |
|   | WATER HOSE<br>12-1/2 FT (3.8M): 312WH<br>25 FT (7.6M): 325WH  | WATER HOSE<br>12-1/2 FT (3.8M): 312WHSF<br>25 FT (7.6M): 325WHSF  |
|   | ARGON HOSE<br>12-1/2 FT (3.8M): 312AH<br>25 FT (7.6M): 325AH  | ARGON HOSE<br>12-1/2 FT (3.8M): 312AHSF<br>25 FT (7.6M): 325AHSF  |

The CKM230 and CKM350 torches come with a 1-3/8 inch (35mm) O.D. x 12 inch (30.5cm) long smooth handle as standard. Optional, 6 inch (15.3cm) long handles are also available. Shorter smooth handle for CKM230 has an O.D. of 1 inch (25.6mm), CKM350 has an O.D. of 1-3/8 inch (35mm).

3 SERIES HEAD ACCESSORIES GAS SAVER



3 SERIES HEAD ACCESSORIES



APPLICATIONS OF:  
STANDARD PARTS:

ARE FOR GENERAL PURPOSE USE.

WEDGE COLLETS:

IMPROVE ARC STARTING.  
IMPROVE ARC STABILITY.  
IMPROVE ARC CONTROL.

CERAMIC (LAVA) CUPS:

ARE USED WHEN REFLECTED HEAT IS HIGH.

ALUMINA CUPS:

ARE USED FOR GENERAL PURPOSE,  
AND WHEN IMPACT RESISTANT CUPS  
ARE REQUIRED.

GAS LENS PARTS:

ARE USED TO REDUCE TURBULENCE  
AND IMPROVE SHIELD GAS COVERAGE  
PATTERNS,  
INCREASES DUTY CYCLE OF TORCH  
AND INCREASES TUNGSTEN STICK  
OUT.

SHORT (STUBBY) PARTS:

ARE USED TO SHORTEN THE OVERALL  
LENGTH OF THE TORCH HEAD.  
REDUCES DUTY CYCLE OF TORCH

GAS SAVER® PARTS:

ARE USED TO SAVE UP TO 40% ON GAS  
CONSUMPTION.  
ARE USED TO SAVE UP TO 60% ON  
CONSUMABLE PARTS.  
ARE USED TO CLEARLY SEE THE WELD  
PUDDLE.  
ARE USED TO ACHIEVE GAS LENS

TUNGSTEN ELECTRODE CONVERSION CHART

| Size Suffix | Inches | Millimeters |
|-------------|--------|-------------|
| 020         | .020"  | .5mm        |
| 040         | .040"  | 1.0mm       |
| 116         | 1/16"  | 1.6mm       |
| 332         | 3/32"  | 2.4mm       |
| 418         | 1/8"   | 3.2mm       |
| 532         | 5/32"  | 4.0mm       |